

coaxial with the engine shaft and secured to the frontal wall (3a) of the casing (3) of the engine (M), an armature operatively attached to the rotor part (2) and an inductor operatively attached to the stator part (4; 4'), the inductor being arranged on a stationary annular component (14, 15; 4'a, 14', 15') of the stator part (4; 4'), facing the armature, wherein the rotor part (2) has symmetry of revolution about the axis of the engine shaft so that it has a peripheral face facing a peripheral face of the stator part (4; 4'), the inductor of the retarder having at least one electromagnetic winding (5; 5').

2. (Amended) The retarder as claimed in claim 1, wherein the rotor part (2) has an external component of substantially cylindrical shape which surrounds the stator part (4) and which constitutes the armature of the retarder (1), said external component having a radial flange (11) secured to the engine shaft, said flange being pierced with a number of holes (13).

3. (Amended) The retarder as claimed in either of claims 1 and 2, wherein the inductor of the retarder is an inductor with poles (16) each surrounded by an induction winding (5) and projecting radially outwardly on the external face of said annular component (14, 15) of the stator part (4).

4. (Amended) The retarder as claimed in claim 3, wherein the poles (16) are secured to a first annulus (14) and the collection of induction windings constitutes a second annulus (15) of larger diameter than that of the first annulus (14), said second annulus (15) being assembled coaxially with said first annulus (14) by fitting each pole (16) into a respective induction winding (5).

5. (Amended) The retarder as claimed in either of claims 1 and 2, wherein the inductor

of the retarder (1) is an inductor with claws (14'b, 15'b) and with one single induction winding (5').

6. (Amended) The retarder as claimed in claim 5, wherein a first set of claws (14'b) constitutes a first annulus (14') and a second set of claws (15'b) constitutes a second annulus (15') with the same diameter as that of the first annulus (14'), said induction winding (5') surrounding a cylindrical component (4'a) of a diameter smaller than that of the first and second annuli (14', 15'), said annuli 14', 15' being assembled coaxially with said cylindrical component (4'a) in such a way that each claw (14'b) of the first set of claws is interspersed between two adjacent claws (15'b) of the second set of claws.

7. (Amended) The retarder as claimed in any of claims 1 to 6, wherein the connecting means comprise a framework (19) which has at least one substantially radial flange (20) centered on the engine shaft and pierced with a number of holes (23), said flange (20) having arms (24) extending from said flange (20) toward the engine (M) to secure the framework (19) to the frontal wall (3a) of the casing (3) of the engine (M), the electromagnetic retarder (1) being housed in a space delimited by the flange (20), the fixing arms (24) and the frontal wall (3a) of the engine (3).

8. (Amended) The retarder as claimed in any of claims 1 to 7, wherein a pulley (6) situated at the output of the engine shaft is arranged between the casing (3) of the engine (M) and the retarder (1).

9. (Amended) The retarder as claimed in claim 8 as associated with claim 2, wherein the flange (11) of said external component (2) incorporates the pulley (6).